

# Data Entry and Information Processing Workers

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## Significant Points

- Employers generally hire high school graduates who meet their requirements for keyboarding speed.
- Although overall employment is projected to decline, the need to replace workers who leave this large occupation each year should produce many job openings.
- Job prospects should be best for those with expertise in appropriate computer software applications.

## Nature of the Work

Organizations need to process a rapidly growing amount of information. Data entry and information processing workers help ensure the smooth and efficient handling of information. By typing text, entering data into a computer, operating a variety of office machines, and performing other clerical duties, these workers help organizations keep up with the rapid changes that are characteristic of today's "Information Age." In addition to the job titles discussed below—such as word processors, typists, and data entry keyers—data entry and information processing workers are known by various other titles, including electronic data processors, keypunch technicians, and transcribers.

*Word processors* and *typists* usually set up and prepare reports, letters, mailing labels, and other textual material. *Typists* make neat, typed copies of materials written by other clerical, professional, or managerial workers. As entry-level workers, typists may begin by typing headings on form letters, addressing envelopes, or preparing standard forms on typewriters or computers. As they gain experience, they often are assigned tasks requiring a higher degree of accuracy and independent judgment. Senior typists may work with highly technical material, plan and type complicated statistical tables, combine and rearrange materials from different sources, or prepare master copies.

Most keyboarding is now done on word processing equipment—usually a personal computer or part of a larger computer system—which normally includes a keyboard, video display terminal, and printer, which may have "add-on" capabilities such as optical character recognition readers. *Word processors* use this equipment to record, edit, store, and revise letters, memos, reports, statistical tables, forms, and other printed materials. Although it is becoming less common, some word processing workers are employed on centralized word processing teams that handle transcription and typing for several departments.

In addition to fulfilling the duties mentioned above, word processors and typists often perform other office tasks, such as answering telephones, filing, and operating copiers or other office machines. Job titles of these workers frequently vary to reflect these duties. Clerk typists, for example, combine typing with filing, sorting mail, answering telephones, and other general office work. Note readers transcribe stenotyped notes of court proceedings into standard formats.

*Data entry keyers* usually input lists of items, numbers, or other data into computers or complete forms that appear on a computer screen. They also may manipulate existing data, edit current information, or proofread new entries to a database for accuracy. Some

examples of data sources include customers' personal information, medical records, and membership lists. Usually, this information is used internally by a company and may be reformatted before other departments or customers utilize it.

Keyers use various types of equipment to enter data. Many use a machine that converts the information they type to magnetic impulses on tapes or disks for entry into a computer system. Others prepare materials for printing or publication by using data entry composing machines. Some keyers operate online terminals or personal computers. Data entry keyers increasingly also work with nonkeyboard forms of data entry, such as scanners and electronically transmitted files. When using the new character recognition systems, data entry keyers often enter only those data which cannot be recognized by machines. In some offices, keyers also operate computer peripheral equipment such as printers and tape readers, act as tape librarians, and perform other clerical duties.

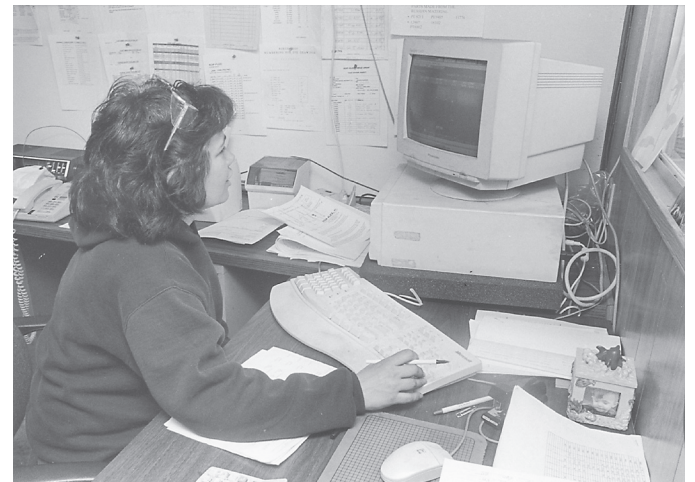
## Working Conditions

Data entry and information processing workers usually work a standard 40-hour week in clean offices. They sit for long periods and sometimes must contend with high noise levels caused by various office machines. These workers are susceptible to repetitive strain injuries, such as carpal tunnel syndrome, neck and back injuries, and eye strain. To help prevent these conditions, many offices have scheduled exercise breaks, ergonomically designed keyboards, and workstations that allow workers to stand or sit as they wish.

## Employment

Data entry and information processing workers held about 633,000 jobs in 2002 and were employed in every sector of the economy; 392,000 were data entry keyers and 241,000 were word processors and typists. Some workers telecommute, working from their homes on personal computers linked by telephone lines to those in the main office. This arrangement enables them to type material at home while still being able to produce printed copy in their offices.

About 1 out of 5 data entry and information processing workers held jobs in firms providing administrative and support services, including temporary help and word processing agencies, and another 1 in 5 worked for State or local government.



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**Training, Other Qualifications, and Advancement**

Employers generally hire high school graduates who meet their requirements for keyboarding speed. Increasingly, employers also are expecting applicants to have training or experience in word processing or data entry tasks. Spelling, punctuation, and grammar skills are important, as is familiarity with standard office equipment and procedures.

Students acquire skills in keyboarding and in the use of word processing, spreadsheet, and database management computer software packages through high schools, community colleges, business schools, temporary help agencies, or self-teaching aids such as books, tapes, and Internet tutorials.

For many people, a job as a data entry and information processing worker is their first job after graduating from high school or after a period of full-time family responsibilities. This work frequently serves as a steppingstone to higher paying jobs with increased responsibilities. Large companies and government agencies usually have training programs to help administrative employees upgrade their skills and advance to higher level positions. It is common for data entry and information processing workers to transfer to other administrative jobs, such as secretary, administrative assistant, or statistical clerk or to be promoted to a supervisory job in a word processing or data entry center.

**Job Outlook**

Overall employment of data entry and information processing workers is projected to decline through 2012. Nevertheless, the need to replace those who transfer to other occupations or leave this large occupation for other reasons will produce numerous job openings each year. Job prospects will be most favorable for those with the best technical skills—in particular, expertise in appropriate computer software applications. Data entry and information processing workers must be willing to upgrade their skills continuously in order to remain marketable.

Although data entry and information processing workers are affected by productivity gains stemming from organizational restructuring and the implementation of new technologies, projected growth differs among these workers. Employment of word processors and typists is expected to decline due to the proliferation of personal computers, which allows other workers to perform duties formerly assigned to word processors and typists. Most professionals and managers, for example, now use desktop personal computers to do their own word processing. However, because technologies affecting data entry keyers tend to be costlier to implement, employment of these workers will decline less than word processors and typists.

Employment growth of data entry keyers will still be dampened by productivity gains, as various data-capturing technologies, such as bar code scanners, voice recognition technologies, and sophisticated character recognition readers, become more prevalent. These technologies can be applied to a variety of business transactions, such as inventory tracking, invoicing, and placing orders. Moreover, as telecommunications technology improves, many organizations will increasingly take advantage of computer networks that allow data to be transmitted electronically. These networks will allow more data to be entered automatically into computers, reducing the demand for data entry keyers.

In addition to being affected by technology, employment of data entry and information processing workers will be adversely affected by businesses that are increasingly contracting out their work. Many organizations have reduced or even eliminated permanent in-house staff—for example, in favor of temporary employment and staffing services firms. Some large data entry and information processing

firms increasingly employ workers in nations with low wages to enter data. As international trade barriers continue to fall and telecommunications technology improves, this transfer of jobs will mean reduced demand for data entry keyers in the United States.

**Earnings**

Median annual earnings of word processors and typists in 2002 were \$26,730. The middle 50 percent earned between \$21,540 and \$32,950. The lowest 10 percent earned less than \$17,750, while the highest 10 percent earned more than \$40,450. The salaries of these workers vary by industry and by region. In 2002, median annual earnings in the industries employing the largest numbers of word processors and typists were as follows:

Local government .....	\$27,840
State government .....	26,440
Elementary and secondary schools .....	24,960
Business support services .....	24,140
Employment services .....	24,050

Median annual earnings of data entry keyers in 2002 were \$22,390. The middle 50 percent earned between \$18,810 and \$26,840. The lowest 10 percent earned less than \$15,910, and the highest 10 percent earned more than \$26,840. The following are median annual earnings for 2002 in the industries employing the largest numbers of data entry keyers:

Federal Government .....	\$25,750
Insurance carriers .....	22,870
Employment services .....	21,150
Accounting, tax preparation, bookkeeping, and payroll services .....	19,950
Data processing, hosting, and related services .....	19,720

**Related Occupations**

Data entry and information processing workers must transcribe information quickly. Other workers who deliver information in a timely manner are dispatchers and communications equipment operators. Data entry and information processing workers also must be comfortable working with office automation, and in this regard they are similar to court reporters, medical records and health information technicians, secretaries and administrative assistants, and computer operators.

**Sources of Additional Information**

For information about job opportunities for data entry and information processing workers, contact the nearest office of the State employment service.